

CLAIMS:

1. A method for the treatment of inflammatory arthritis (IA) in a human subject, comprising: orally administering to an individual in need of such treatment an effective amount of N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (IB-MECA) or 2-chloro-N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (Cl-IB-MECA);

wherein the effective amount is an amount which is in a range between D_X and D_Y; D_X being an amount lower than D_{MAX} and D_Y being an amount higher than D_{MAX}; D_{MAX} being an amount that yields a maximal therapeutic effect; both D_X and D_Y yield a therapeutic effect that is substantially less than that obtained at D_{MAX}.

2. A method according to Claim 1, wherein the effective amount is less than the maximal tolerated dose.
3. A method according to claim 1, wherein the effective amount is such so as to yield a therapeutic effect that is at least 50% of the maximal therapeutic effect that can be achieved with said active agent.
4. A method of Claim 1, wherein the active agent is administered once a day at a dose of less than about 70 microgram/Kg.
5. A method of Claim 1, wherein the active agent is administered once a day at a dose of less than about 5 mg.
6. A method of Claim 1, wherein the active agent is administered twice a day at a dose of less than about 57 microgram/Kg each dose
7. A method of Claim 1, wherein the active agent is administered twice a day at a dose of less than about 4 mg each dose.
8. A method for the treatment of inflammatory arthritis (IA) in a human subject, comprising orally administering to an individual in need of such treatment an effective amount of N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (IB-MECA) or 2-chloro-N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (CL-IB-MECA), wherein the effective amount is an amount which the human

equivalent of a murine dose of 0.001 mg/Kg to 0.4 mg/Kg administered once or twice per day

9. A method according to Claim 7, wherein the effective amount is an amount within the range of about 0.14 to about 57 microgram/Kg.
- 5 10. A method according to Claim 7, wherein the effective amount is within the range of about 0.01 to 4 mg.
11. A method according to Claim 7, wherein the effective amount is an amount within the range of about 0.14 to about 28 microgram/Kg.
12. A method according to Claim 7, wherein the effective amount is a dose
10 within the range of about 0.01 to 2 mg.
13. A method according to Claim 7, wherein the effective amount is an amount within the range of about 1.4 to about 21 microgram/Kg.
14. A method according to Claim 7, wherein the effective amount is a dose within the range of about 0.1 to 1.5 mg.
- 15 15. Use of an effective amount of N6- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (IB-MECA) or 2-chloro-N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (Cl-IB-MECA) for the preparation of a pharmaceutical composition for the treatment of inflammatory arthritis, the effective amount is an amount which is in a range between D_x and D_y ; D_x being an amount lower than D_{MAX} and D_y being
20 an amount higher than D_{MAX} ; D_{MAX} being an amount that yields a maximal therapeutic effect; both D_x and D_y yield a therapeutic effect that is substantially less than that obtained at D_{MAX} .
16. Use according to Claim 15, wherein the effective amount is less than the maximal tolerated dose.
- 25 17. Use according to Claim 15, for the production of a pharmaceutical composition for once daily administration, wherein the effective amount is an amount for administration to a human individual at a dose of less than about 70 micrograms/Kg.

18. Use according to Claim 15, for the production of a pharmaceutical composition for once daily administration, wherein the effective amount is less than about 5 mg.
19. Use according to Claim 15, for the production of a pharmaceutical
5 composition for twice daily administration, wherein the effective amount is an amount for administration to a human individual at a dose of less than about 57 micrograms/Kg.
20. Use of an effective amount of N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-uronamide (IB-MECA) or 2-chloro-N⁶- (3-iodobenzyl)-adenosine- 5'-N-methyl-
10 uronamide (Cl-IB-MECA) for the preparation of a pharmaceutical composition for the treatment of inflammatory arthritis, the effective amount is an amount which the human equivalent of a murine dose of 0.001 mg/Kg to 0.4 mg/Kg administered once or more per day.
21. Use according to Claim 20, for the production of a pharmaceutical
15 composition for twice daily administration.
22. Use according to Claim 20, for the production of a pharmaceutical composition for administering said active agent to a subject a dose of about 0.14 to about 57 microgram/Kg.
23. Use according to Claim 20, wherein the effective amount is within the range
20 of about 0.01 to 4 mg.
24. Use according to Claim 20, for the production of a pharmaceutical composition for administering said active agent to a subject a dose of about 0.14 to about 28 microgram/Kg.
25. Use according to Claim 19, wherein the effective amount is within the range
25 of about 0.01 to 2 mg.
26. Use according to Claim 20, for the production of a pharmaceutical composition for administering said active agent to a subject a dose of about 1.4 to about 21 microgram/Kg.

27. Use according to Claim 20, wherein the effective amount is within the range of about 0.1 to 1.5 mg.

28. A pharmaceutical composition for use in the treatment of a method according to any one of claims 1 to 14.